



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,998	10/05/2006	Kai Schiemann	MERCK-3073	6474
23599 7590 08/07/2008 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201				
EXAMINER				
CHU, YONG LIANG				
ART UNIT		PAPER NUMBER		
1626				
MAIL DATE		DELIVERY MODE		
08/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,998

Applicant(s)

SCHIEMANN ET AL.

Examiner

YONG CHU

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) 2-6, 8, 10-12, and 14-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 1, 7, 13 and 16-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 04/23/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim 9 has been canceled by the amendment on 04/23/2008. Claims 17-25 are new by the amendment. Claims 1-8, and 10-25 are pending in the instant application.

Information Disclosure Statement

Applicants' Information Disclosure Statements, filed on 04/23/2008 has been considered. Please refer to Applicant's copy of the PTO-1449 submitted herewith.

Response to Amendment

The amendment by Applicants' representative Csaba Henter dated on 04/23/2008 has been entered.

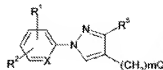
Status of the Claims

Claims 2-6, 8, 10-14 are non-elected subject matter. Amended claim 15 is further withdrawn from further consideration by the Examiner as being drawn to non-elected inventions under 37 CFR 1.142(b), because it is a method of use claim, which is distinct from product a claim.

Elected and Examined Subject Matter

The scope of the invention of the elected subject matter and the examined subject matter is as follows:

Art Unit: 1626



A compound of the Formula I according to claim 1,

wherein:

X is CH;

m is 1,2, or 3;

Q is saturated, unsaturated or aromatic mono- or bicyclic heterocyclic radical, which is unsubstituted or mono- or polysubstituted according to Claim 1;

R⁵ is a optionally substituted phenyl; and

R¹ and **R²** are H, or Hal.

As a result of the election and the corresponding scope of the invention identified supra, the remaining subject matter of claims 1, 7, 13, and 16-25 are withdrawn from further consideration pursuant to 37 CFR 1.142 (b) as being drawn to non-elected inventions. The withdrawn compounds contain varying functional groups, which are chemically recognized to differ in structure, function, and reactivity. Therefore, claims 1, 7, 13, and 16-25 will be examined on the merits.

Response to Arguments/Remarks

Specification

Applicant's submission of continuing data to which the instant application claims benefit from in the first paragraph of the specification obviated the objection.

Rejection under 35 U.S.C. §112, 1st paragraph

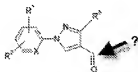
Applicant's amendment over the rejected claims obviates the rejection.

Rejection under 35 U.S.C. §112, 2nd paragraph

Applicant's amendment over the rejected claim 1 for missing the definition of substituent "X" by importing the definition from the specification obviates the rejection.

Applicant's amendment over the rejected claim 16 by importing each the definition of the substituents of formula (I) from the specification obviates the rejection.

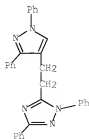
In terms of the rejected claim 7 for the incomplete formula IA, Applicant's amendment and argument have been considered, and are found not persuasive. The



incomplete formula IA as marked by "?", because it is not clear what substituent is attached to the carbonyl group, a -H, or other substituents. If it is -H, applicant should make the record clear, as well as other formulae in the specification such as Formula IB. Therefore, the rejection is maintained.

Rejection under 35 U.S.C. §102(b)


Applicant's amendment and argument over rejected claim 1 has been fully considered, and is found not persuasive. The amended claim 1 is still anticipated by the previously cited Caramella reference. It is because the cited prior art compound



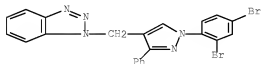
(CAS RN 165963-83-7) still anticipates scope of the amended claim 1.

Art Unit: 1626

The amended claim 1 claims a compound of formula I, wherein Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic. Claim 1 is not clear whether the heterocyclic of "Het" is substituted or unsubstituted, is substituted by what group, if it is substituted. The examiner gives the broadest interpretation of claim 1 regarding "Het" in light the specification at page 11, line 15 as one of the preferred "Het"

as , wherein the heterocyclic is substituted by a phenyl group. Therefore, the amended claim 1 is still anticipated by the prior art compound, wherein **X** is CH; **m** is 2; **Q** is an aromatic monocyclic heterocyclic radical; **R⁵** is a optionally substituted phenyl; and **R¹** and **R²** are H, (see compound 5, page 517). Therefore, the rejection is maintained.

In addition, the amended claim 1 is further rejected under 35 U.S.C. §102(b) by Katritzky et al, *Journal of Heterocyclic Chemistry* (1996), 33(6), pp. 1637-1646 ("Katritzky et al"). A specific compound (CAS RN 187095-38-1)



is disclosed, which anticipated the instantly claimed scope of invention, wherein **X** is CH; **m** is 1; **Q** is an aromatic bicyclic heterocyclic radical; **R⁵** is a optionally substituted phenyl; and **R¹** and **R²** are Hal.

Claims objection

Claims 1, 7, 13, and 16-25 are objected to for containing non-elected subject matter and/or depend on rejected claim 1.

Conclusions

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu whose telephone number is 571-272-5759. The examiner can normally be reached on 7:00 am - 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571-272-0699. The fax phone

Art Unit: 1626

number for the organization where this application or proceeding is assigned is 571-273-8300.

Status Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Yong Chu, Ph.D./
Patent Examiner
Art Unit 1626

/Kamal Saeed, Ph.D./
Supervisory Patent Examiner
Art Unit 1626